Data Sheet (Cat.No.TMAB-11810)

TargetMol

Anti-Protein S Polyclonal Antibody

Product Details

Ig Type:	IgG
Reactivity:	Mouse,Rat (predicted:Human,Cow,Horse,Sheep)
Molecular Weight:	Theoretical: 71 kDa. Actual: 75 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	1. Paraformaldehyde-fixed, paraffin embedded (Rat liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Protein S) Polyclonal Antibody, Unconjugated (TMAB-11810) at 1:400 overnight at 4°C, followed by a conjugated secondary for 20 minutes and DAB staining. 2. Sample: Plasma (Mouse) Lysate at 40 µg Primary: Anti-Protein S (TMAB-11810) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 71 kD Observed band size: 75 kD
Application:	WB,IHC-P,IHC-Fr,IF
Recommended	WB: 1:500-2000; IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human Protein S/PROS
Antigen Species:	Human
Gene ID:	5627
Uniprot ID:	P07225

Research Background

Protein S (PROS) is a vitamin K-dependent plasma protein that inhibits blood clotting by serving as a cofactor for activated protein C (APC) and facilitates clearance of early apoptotic cells. In the plasma, circulating Protein S becomes inactive upon complexing with C4b-binding protein (C4BP); 60-70% of Protein S circulates in complex with C4BP. Calcium-dependent association of C4BP-Protein S with apoptotic cells influences the regulation of complement activation. Protein S has APC-independent anticoagulant activity through direct inhibition of prothrombin activation via interactions with Factor X A, Factor V A and phospholipids. Autosomal dominant Protein S deficiency (levels 15 to 37% of normal) correlates with severe recurrent venous thrombosis.

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